CLAIMS:

1.   A method for diagnosing breast cancer in a subject comprising determining levels of expression of p14 peptide in one or more samples from said subject, a high level of expression signifying a high probability for breast cancer in said subject.

2.   The method of Claim 1, comprising assaying for the level of p14 peptide in a sample obtained from the subject, said method comprises:

    (a)   contacting said sample with anti-p14 antibodies;

    (b)   determining binding of anti-p14 antibodies to p14 peptide.

3.   The method of Claim 2, wherein said sample is a tissue or body fluid sample excised or withdrawn from a suspicious area in the breast of the subject.

4.   The method of Claim 3, wherein said sample is selected from fresh biopsy section, cryo-section or paraffin embedded section.

5.   The method of Claim 1 or 2, wherein said sample is a blood sample.

6.   The method of Claim 1, comprising assaying for the level of anti-p14 antibodies in a sample obtained from the subject, said method comprises:

    (a)   contacting said sample with p14 peptide;

    (b)   determining binding of p14 peptide to anti-p14 antibodies.

7.   The method of Claim 6, wherein said sample is a blood sample.

8.   The method of Claim 7, wherein said p14 peptide is recombinant peptide.

9.   The method of Claim 8, wherein said p14 peptide is His-tag p14 peptide comprising the sequence depicted in SEQ ID NO:2.

10.   A method for screening samples into such which signify that subjects from which they were obtained have a relatively high possibility of having or being susceptible of developing breast cancer and such which signify that subjects from which they were obtained have a relatively lower probability of having or being susceptible of developing breast cancer, the method comprising contacting the samples with anti-p14 antibodies and determining binding of anti-p14 antibodies and p14 peptide in said sample, a high degree of binding

signifying a corresponding higher probability of having or being susceptible of developing breast cancer.

11.   The method of Claim 10, wherein said sample is a tissue or fluid sample excised or withdrawn from a suspicious area in the breast of the subject.

5   12.   The method of Claim 11, wherein said sample is selected from fresh biopsy section, cryo-section or paraffin embedded section.

13.   The method of Claim 10, wherein said sample is a blood sample.

14.   A method for screening samples into such which signify that subjects from which they were obtained have a relatively high possibility of having or

10   being susceptible of developing breast cancer and such which signify that subjects from which they were obtained have a relatively lower probability of having or being susceptible of developing breast cancer, the method comprising contacting the samples with p14 peptide and determining binding of p14 peptide with anti-p14 antibodies, a high degree of binding signifying a corresponding

15   higher probability of having or being susceptible of developing breast cancer.

15.   The method of Claim 14, wherein said sample is a blood sample.

16.   The method of Claim 14 or 15, wherein said p14 peptide is recombinant p14 peptide.

17.   The method of Claim 16, wherein said p14 peptide is His-tag p14 peptide

20   comprising the sequence depicted in SEQ ID NO:2.

18.   A kit for diagnosing breast cancer in a subject comprising anti-p14 antibodies and instructions for use of said anti-p14 antibodies in determining levels of expression of p14 peptide in one or more samples from said subject, a high level of expression signifying a high probability for breast cancer in said

25   subject.

19.   A kit for diagnosing breast cancer in a subject comprising p14 peptide and instructions for use of said p14 peptide in determining levels of anti-p14 antibodies in one or more samples from said subject, a high level of anti-p14 antibodies signifying a high probability for breast cancer in said subject.

30   20.   The kit of Claim 19, wherein said p14 peptide is recombinant p14 peptide.

21. The kit of Claim 20, wherein said recombinant p14 peptide is His-tag p14 peptide comprising the sequence as depicted in SEQ ID NO:2.

22. A method for the treatment of breast cancer comprising administering to a subject in need of anti-breast cancer treatment an amount of anti-p14 antibodies, the amount being sufficient to achieve an anti cancer effect in said subject.

23. The method of Claim 22, wherein said anti-p14 antibodies are humanized antibodies.

24. The method of Claim 22, wherein said anti-p14 antibodies are bound to a protein transducing element.

25. The method of Claim 24, wherein said protein transducing element is the (37-72) Tat fragment of HIV-HV1B1 Tat.

26. The method of Claim 22, wherein said anti-p14 antibodies are bound to a cytotoxic agent

27. A method for the treatment of breast cancer comprising administering to a subject in need an amount of p14 peptide, the amount being effective to elicit production of anti-p14 antibodies in said subject.

28. A pharmaceutical composition for the treatment of breast cancer comprising as active ingredient an amount of anti-p14 antibodies, the amount being sufficient to achieve a therapeutic effect in said subject.

29. The pharmaceutical composition of Claim 28, wherein said anti-p14 antibodies are humanized antibodies.

30. The pharmaceutical composition of Claim 29, wherein said anti-p14 antibodies are bound to a protein transducing element.

31. The pharmaceutical composition of Claim 30, wherein said protein transducing element is the (37-72) Tat fragment of HIV-HV1B1 Tat.

32. The pharmaceutical composition of Claim 28, wherein said anti-p14 antibodies are bound to a cytotoxic agent.

33. A vaccine comprising as active ingredient an amount of p14 peptide or an immunogenic fragment thereof, the amount being sufficient to elicit in a subject production of anti-p14 antibodies.

34.   Use of amount of anti-p14 antibodies for the preparation of a pharmaceutical composition for the treatment of breast cancer in a subject, the amount of said anti-p14 antibodies sufficient to achieve an anti cancer effect in said subject.

5   35.   Use of Claim 34, wherein said anti-p14 antibodies are humanized antibodies.

36.   Use of Claim 34, wherein said anti-p14 antibodies are bound to a protein transducing element.

37.   Use of Claim 36, wherein said protein transducing element is the (37-72)

10 Tat fragment of HIV-HV1B1 Tat.

38.   Use of Claim 34, wherein said anti-p14 antibodies are bound to a cytotoxic agent.

39.   Use of an immunogenic amount of p14 peptide for the preparation of a vaccine, the amount of p14 peptide being effective to elicit an immune response

15 in a subject.